

Answering the call for neuroscience leaders

Professor highlights necessity for institutions to conduct studies into treatment for brain disease

RESEARCH into neuroscience, and the nurturing and development of scientists who will take this work into the future, is being advanced by Qatar Foundation (QF), according to an expert in the field.

Professor Pierre Magistretti, President, International Brain Research Organization (IBRO), highlighted the necessity for foundations, universities, and other institutions to spearhead studies into potential new treatments for brain diseases, while visiting Qatar for a landmark neuroscience symposium.

Qatar Biomedical Research Institute (QBRI), a member of Qatar Foundation whose mission is to conduct groundbreaking research that will help to improve healthcare through innovation, hosted the QBRI-IBRO-MENA Neuroscience Conference at Hamad bin Khalifa University Student Center from 16-17 December 2014. The symposium, attended by global neuroscience experts, signified the burgeoning partnership between QBRI and IBRO, and was preceded by a "school" where students from across the world gained a greater understanding of neurogenetic principles, designed to encourage them to pursue academic and research careers in this area of science.

The IBRO-MENA sub-region, now based in Doha, was established in 2011, and Professor Magistretti, who is also Dean, Biological and Environmental Science and Engineering, and Distinguished Professor, Bioscience, at King Abdullah University of Science and Technology in Saudi Arabia, told *QF Telegraph*: "Collaboration with QBRI is very important for IBRO, as we must have a strong partner in this region to help us develop our initiatives.

"In QBRI, we have that strong partner, due to its strong focus on neuroscience and its excellent scientists. This collaboration is extremely valuable and very close, and this conference in Doha – which we considered to be a natural path for the IBRO-MENA sub-region to take – and the school that we held here has only enhanced this."

Topics discussed at the symposium included behavioral and psychiatric disorders; neurodegenerative disorders; autism; epilepsy; and stroke. Professor Magistretti emphasized that, with the pharmaceutical industry concentrating less investment in neuroscience, other institutions must step into the void, and QF has



Professor Pierre Magistretti, President, International Brain Research Organization

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embraced the opportunity and the challenge.

"From what I have learned, and from what I have personally experienced, QF is making extremely laudable efforts to nurture knowledge and to support research in many fields, including medicine and neuroscience," Professor Magistretti said. "Support for basic research not only creates and fosters knowledge for humanity, but also represents investment in a country and its economy. Any initiative, such as QF, that provides this support for research and education is extremely positive for the world."

Professor Magistretti said Dr Hilal Lashuel, Executive Director, QBRI – whom he described as "an outstanding neuroscientist" – had been "instrumental" in the creation of the IBRO-MENA sub-region, whose school at the 2014 conference was built around the fundamental aspects of neurogenetics, allowing students to participate in lectures and discussions, as well as to carry out experiments

and learn techniques in laboratories. "IBRO is committed to facilitating the development of the next generation of neuroscientists, by expanding its work into areas where the field of neuroscience is in the process of being established," he added.

"The work of the IBRO-MENA sub-region is providing opportunities for training, and the enhancement of knowledge, expertise, and the human potential of the students who participate. The school brings together students and faculty from across the world, and provides theoretical elements and practical components.

"In addition to education and training, there must be global advocacy for neuroscience. From both a human and economic perspective, brain disorders are extremely costly, and the development of new treatments and measures cannot progress without research. That is why collaboration with partners of the caliber of QBRI is such an important aspect of IBRO's work and its mission."

OPINION

Basem Ahmed El Mallawani

Importance of after school activities in learning

DID you know that the most prominent academic institutions throughout the world including Harvard, Yale, Stanford, Cambridge and Oxford all host extracurricular programs in sport intramurals, music, literature and the performing arts? Why is that? Does it provide a worthwhile impact on their students or is it just more appealing for their reputation? Would it even be beneficial for our young ones to participate in these types of activities?

Here's some food for thought; a study conducted by the Harvard Family Research Project (HFRP) of Harvard University looked into the potential of high quality afterschool programs. They gathered empirical data over the course of ten years. Their findings... "Children and youth who participate in after school programs reap a host of positive benefits in a number of interrelated outcome areas such as academic, social/emotional, prevention, and health and wellness (Wimer & Weiss, 2008)." Furthermore, this study concluded that students in elementary and middle-schools who frequently participated in extracurricular activities scored higher on test scores in math and reading than their counterparts who did not. Amazing!

As an educator and sports performance coach, I witness this type of phenomenon happening all the time. Students attend extracurricular activities where they are taught new and challenging skillsets and because they are willingly doing so they are eager to learn, regardless of the consequences. This certainly carries over into the classroom and improves their scores. I believe these types of scenarios produce breeding grounds for success in many other areas as well, especially when they are facilitated by effective teachers. At Qatar Academy Msheireb, we offer a variety of these types of activities every Monday and Tuesday after school. Needless to say, every week, students attend eager to learn and participate. You have students in Kindergarten mixed with first and second graders and this allows for co-curricular activities to take place. You see it happening right in front of your eyes where they are

making new friends and learning positive social behaviours that aren't taught in their traditional classroom settings. They're learning how to play a sport together, perform in a musical play, take pictures for a student newspaper, etc. I enjoy this part of my job because this is where I get to foster an active culture where students form a bonding community amongst one another.

"Extracurricular activities instill valuable attributes such as improved self-confidence, self-esteem, discipline, responsibility and commitment"

It instills valuable attributes such as improved self-confidence, self-esteem, discipline, responsibility and commitment. It exposes youth to unique concepts such as leadership, teamwork and sportsmanship. Lastly, through these activities, children acquire a sense of self-identity which is a concept we don't always pay particular attention to.

In closing, prestigious schools embed extracurricular activities into their education system because they understand that by affording youth opportunities to learn and practice new skills through hands-on experiential learning, they are inadvertently improving their chances at academic achievement. It yields a stronger well-rounded performing student. The science supports this but more importantly it cultivates a culture of success. If we are to capitalize on this success, we need to invest in this vision today. I now pass this vision on to you.



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